

SPECIFICATIONS:

Stepper Motor Controllers: A-MCA Series

Specification	Value
Integrated Controller	Yes
Communication Interface	RS-232
Communication Protocol	Zaber ASCII, Zaber Binary
Maximum Current Draw	motor dependent mA
Power Supply	12-48 VDC
Power Plug	Molex Mini-Fit Jr. 3pin
Controller Maximum Current Per Phase	2500 mA
Motor Connection	D-sub 15 female
Default Resolution	1/64 of a step
Data Cable Connection	Minidin 6
Manual Control	Indexed knob with push switch
Axes of Motion	1
LED Indicators	Power, Comm, Slip/Stall, Error
Operating Temperature Range	0 to 50 degrees C
RoHS Compliant	Yes
CE Compliant	Yes
Weight	0.15 kg
Limit Sensors per Axis	1

FEATURES

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A chopper drive is one method of driving a stepper motor with constant current rather than constant voltage. This reduces the effects of counter EMF and inductance, increasing torque at higher speeds.

One or more of Zaber's A-MCA stepper motor controllers can be daisy-chained with any A-Series and T-Series products and controlled from a single RS232 serial port.. They can also be daisy-chained with any other A-series or T-series products. Convenient 6-pin mini din cables on the unit allow for direct interconnection between units in close proximity. For longer distances, standard cable extension can be used. To control motor position, simply transmit on the serial port the unit number of the device you want to move, a simple move command and the position desired. After the move, the A-MCA will report the final position.



Changing device settings, such as resolution or current limit, is as easy as issuing a command: there are no dipswitches, jumpers or trim-pots to set. You can set the resolution to full stepping, half stepping or microstepping at up to 256 microsteps per step. You can set the running current and hold current independently, with values ranging from 0 to 2.5A in 25mA increments.

The A-MCA's indexed knob provides convenient manual control via user-selectable modes. In velocity mode, each increment of the knob increases or decreases the speed by a fixed amount. In displacement mode, each increment of the knob moves the device by a user-configurable distance. You can also issue a stop command by depressing the knob during any operation. During manual moves, our controllers constantly transmit motor or actuator position to the computer, so it can be displayed by the software.

For more detailed information, please consult the [user's manual](#).